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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,725	01/11/2002	Gerald Tablada Caneba	1992.VIN	4004

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EXAMINER

ZALUKAEVA, TATYANA

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 08/01/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

10/045,725

Applicant(s)

CANEBA ET AL.

Examiner

Tatyana Zalukaeva

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,7 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 1-8 in Paper No. 5 is acknowledged.

The traversal is on the ground(s) that as Applicants believe that the polymer as amended cannot be made by another process that that described in claims 9-14. This is not found persuasive because

- as was shown, and as will be shown in a rejection section below the block copolymer, as instantly claimed can be obtained by a process different from that of claims 9-14.
- Claims 9-14 have been cancelled by Applicants amendment accompanying this paper. Therefore, the traversal is moot.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 5 and 6 are cancelled in Paper No.5
3. Claims 1-4, 7 and 8 are examined on the merits.

Information Disclosure Statement

4. The information disclosure statement filed February 3, 2003 fails to comply with 37 CFR 1.98(a)(1), which requires a list of all patents, publications, or other information submitted for consideration by the Office. The title list is present in the file, however, the PTO-1449 form is missing. Applicants are kindly requested to submit another copy of IDS.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4, 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Hosotte-Filbert et al (U.S. 5,681,877).

Hosotte-Filbert discloses block copolymers denoted by AB from acrylic or methacrylic acid, the corresponding blocks being denoted by A, and from alkyl acrylate or methacrylate with the alkyl chain being C1 -C10, the corresponding blocks being denoted by B (abstract).

The acrylic block copolymers AB used according to the invention have a number-average molecular weight (Mn) of between 2000 and 500,000, preferably of between 2000 and 100,000.(col.3, lines 43-47).

The block A, particularly PAA, represents from b 5 to 95% by weight of the block copolymer, preferably less than 50% by weight of said block copolymer (col. 4, lines 36-39). In particular, the block copolymer identified in Example 1 in col. 5: The copolymer used is a PAA-b-PMMA of Mn =9900, containing 22% of PAA. Since weight average molecular weigh Mw is equal or greater than Mn by definition, the Mw will inherently be within the instantly claimed range.

Therefore all limitations of the instant claims 1-4, 7, 8 are either expressly or inherently met by Hosotte-Filbert.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a)

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hosotte-Filbert in view of McGrath et al (U.S. 5,098,959)

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Hosotte-Filbert discloses block copolymers of AA and MMA with characteristics as instantly claimed. Hosotte-Filbert is silent about tapered block copolymers, as a feasible option of a block copolymer.

McGrath discloses how the additional copolymerizable monomers may be included in the polymerization process for obtaining block copolymer in order to modify the resulting block copolymer properties. The copolymerizable monomers may be incorporated as separate blocks or added concurrently to the polymerization, resulting in the formation of tapered block copolymers. Copolymers of McGrath are obtained by living anionic polymerization.

Hosotte-Filbert does not elucidate the method of making block copolymers, thus leaving it up to those skilled in the art to choose the route of polymerization. However, Hosotte-Filbert is concerned with improvement of dispersing and wetting properties of resulting polymer, thus motivating those skilled in the art to utilize modifications to a process and a product in order to modify the properties. That what is specifically done by McGrath, i.e. improvement and modification of properties by obtaining tapered block copolymers. Therefore, a person skilled in the art at the time the invention was made would have found it obvious to utilize tapered block copolymers as suggested by McGrath in lieu of Hosotte-Filbert' block copolymers in order to improve dispersing and wetting properties and thus to arrive at the instant claim 7.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Other prior art shown in PTOL-892 describes block copolymers

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of acrylic acid and other vinyl monomers, as well as particularities of tapered block copolymers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tatyana Zalukaeva whose telephone number is (703) 308-8819. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703) 308-2450. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

Tatyana Zalukaeva, Ph.D.
Primary Examiner
Art Unit 1713



July 21, 2003